

WHAT IS CLAIMED IS:

1. A maintenance method for an ink jet head  
which ejects ink supplied via an ink supply path, as  
ink droplets from a plurality of orifices arranged in  
5 an orifice plate, the method comprising:

controlling the pressure in said ink supply path  
against the atmospheric pressure applied to a surface  
of the ink to push the ink out of each orifice and then  
align the surface of the ink to a surface of said  
10 orifice plate; and

sucking ink near each orifice in a state where  
the ink surface is approximately aligned to the surface  
of said orifice plate.

2. A maintenance apparatus for an ink jet head  
15 which ejects ink supplied via an ink supply path, as  
ink droplets from a plurality of orifices arranged in  
an orifice plate, the apparatus comprising:

a pressure control section which controls the  
pressure in said ink supply path against the  
20 atmospheric pressure applied to a surface of the ink to  
push ink out of each orifice and then align the surface  
of the ink to a surface of said orifice plate; and

an ink suction section which sucks ink near each  
orifice in a state where the ink surface is  
25 approximately aligned to the surface of said orifice  
plate by said pressure control section.

3. The maintenance apparatus according to

claim 2, wherein said ink suction section includes a suction nozzle which moves in an arrangement direction of said orifices along said orifice plate.

5        4. The maintenance apparatus according to claim 3, wherein the surface of said orifice plate is a protection member arranged to surround each orifice, and said suction nozzle is set in contact with or separated from said protection member by an air gap during the movement.